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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,912	10/30/2003	Jun Lu	03-0686 1496.00321	8216
24319	7590	02/19/2008		
LSI CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			EXAMINER WU, JIANYE	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 02/19/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,912	Applicant(s) LU ET AL.	
	Examiner Jianye Wu	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-16** are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US, US 2003/0144828 A1, hereinafter Lin).

For **claim 1**, Lin discloses an apparatus comprising:

an input circuit (416 of FIG. 14) configured to generate a plurality of data paths (e.g., 444-447) of FIG. 14) in response to an input data signal (433 of FIG. 14) having a plurality of data items (data of input 433 of FIG. 14) sequentially presented in a first order (the data sequence order on input 433 of FIG. 14);

a storage circuit (FREG 425 or REGW 426 of FIG. 14) configured to store each of said data paths in a respective shift register chain (Shift Register, FIG. 75(A) and the chains of 421-424, 425-428 and 429-432, FIG. 14); and

an output circuit (419 of FIG. 14) configured to generate an output data signal (434 or or 435, FIG. 14) in response to each of said shift register chains (FIG. 14), wherein said output data signal presents said data items (data on output 435 of FIG. 14)

in a second order items (the sequence data on output 434 or 435 of FIG. 14) different from said first order.

As to **claim 2**, Lin discloses the apparatus according to claim 1, wherein said first order comprises a sequential presentation of said plurality of data items (the sequence data on 433 of FIG. 14).

As to **claim 3**, Lin discloses the apparatus according to claim 1, wherein said second order comprises a sequential presentation of said plurality of data items (the sequence data on output 434 or 435 of FIG. 14).

As to **claim 4**, Lin discloses the apparatus according to claim 1, wherein said input circuit comprises a demultiplexer circuit (425-428, FIG. 14; the data from input 433 is demultiplexed into multiple paths 444-447, FIG. 14).

As to **claim 5**, Lin discloses the apparatus according to claim 1, wherein said output circuit comprises a multiplexer circuit (e.g., circuit 419 multiplexes data on paths 444-447 into output 434, FIG. 14).

As to **claim 6**, Lin discloses the apparatus according to claim 1, wherein said input circuit is controlled by a finite state machine (FIG. 20 and a four finite state machine, [0037], line 1-3; notice that all circuits are controlled by the clock logic for which the FSM refers to).

As to **claim 7**, Lin discloses the apparatus according to claim 1, wherein said output circuit is controlled by said finite state machine (FIG. 20 and a four finite state machine, [0037], line 1-3; notice that all circuits are controlled by the clock logic for which the FSM refers to).

As to **claim 8**, Lin discloses the apparatus according to claim 1, wherein each of said data paths is configured to have a propagation delay (delay controls, [0249], line 4).

Claims 9-16 are rejected because they are equivalent "means for" claims of apparatus claims of 1-8.

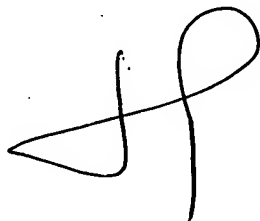
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianye Wu whose telephone number is (571)270-1665. The examiner can normally be reached on Monday to Thursday, 8am to 7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianye Wu

2/5/08



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